

DATASHEET

SHMT1 Rabbit Polyclonal Antibody

CAT. NO. APA13135

KEY FEATURES

Target	SHMT1	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Pyridoxal phosphate (PLP)-dependent enzyme that catalyzes the reversible conversion of serine and tetrahydrofolate (THF) to glycine and 5,10-methylene THF, serving as a critical component of the folate cycle and facilitating one-carbon biosynthetic reactions essential for methionine, purine, and pyrimidine synthesis -dependent enzyme that catalyzes the reversible conversion of serine and tetrahydrofolate (THF) to glycine and 5,10-methylene THF, serving as a critical component of the folate cycle and facilitating one-carbon biosynthetic reactions essential for methionine, purine, and pyrimidine synthesis .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to SHMT1
Specificity	Recognizes endogenous levels of SHMT1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human SHMT1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 37; Observed: 53 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Serine hydroxymethyltransferase, cytosolic; SHMT; Glycine hydroxymethyltransferase; Serine methylase
Gene Symbol	SHMT1
Entrez Gene	6470(Human); 20425(Mouse)
SwissProt	P34896(Human); P50431(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

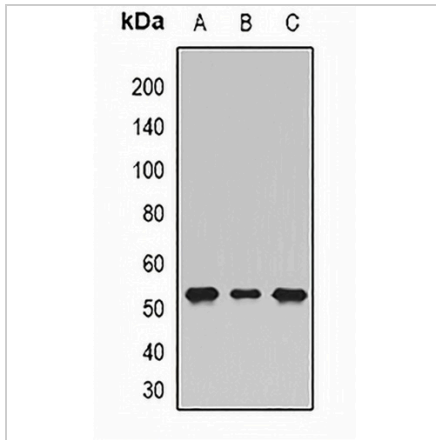
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

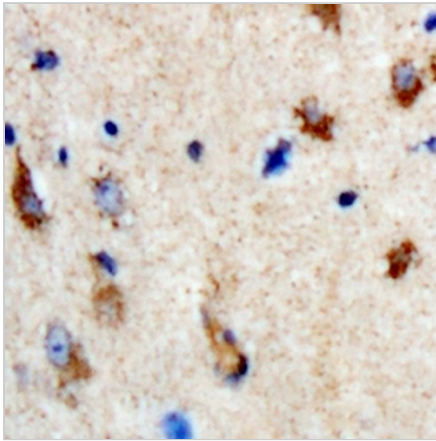
SHMT1 Rabbit Polyclonal Antibody

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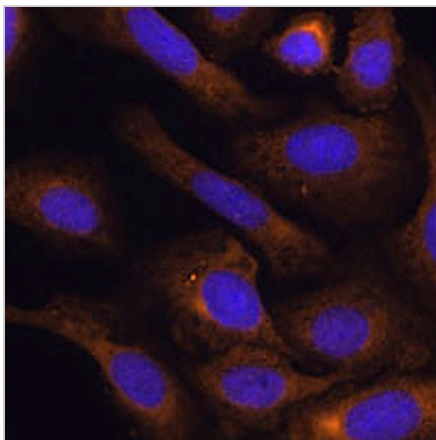
DATA



Western blot analysis of SHMT1 expression in HepG2 (A), MCF7 (B), HeLa (C) whole cell lysates. (Predicted band size: 37; 44; 49; 53 kD; Observed band size: 53 kD)



Immunohistochemical analysis of SHMT1 staining in rat brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of SHMT1 staining in U2OS cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.